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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,916	08/02/2001	Atsushi Hasegawa	HITA-0081	3985

7590

10/06/2003

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EXAMINER

NGUYEN, H A T

ART UNIT

PAPER NUMBER

2812

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,916

Applicant(s)

HASEGAWA, ATSUSHI

Examiner

Ha T. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8, 9 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8, 9, 17-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Notice to applicant

1. Applicants' Amendment and Response to the Office Action mailed 3-11-3 has been entered and made of record (Paper No. 0803).

Response to Amendment

2. In view of Applicants' cancellation of the claims, the objection to and the rejection of claims 1-7, 10-16, 23-26 under 35 U.S.C. 103 have been rendered moot.

In view of Applicants' amendment to the claims, the objection to claims 8, 9, 17, and 20 has been withdrawn.

Applicants' arguments with regard to the rejections under 35 U.S.C. 103 have been fully considered, but they are not deemed to be persuasive for at least the following reasons.

Applicants' argued that the metal wiring is not a thin film metal layer and does not form under the passivation film. The examiner disagreed, as shown in Fig. 9A of Yamagata et al. (U.S. Patent 6528824, hereinafter "Yamagata"), the wiring line is formed under a passivation film (layers between the wiring lines and the anode 901 in the vertical direction), the thickness of the wiring line alone does not provide novelty to the claims. Therefore, the combined teaching of Yamamoto et al. (U.S. Patent 5585290, hereinafter "Yamamoto") and Yamagata does make obvious the limitations of claims 8, 9, and 17-22.

Applicants are referred to modified ground of rejection below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto in view of Yamagata et al. (U.S. Patent 6528824, hereinafter "Yamagata").

Referring to Figs. 1(a), 1(b), 25, 32(a), 32(b), related text and example 10, Yamamoto discloses an active matrix display device comprising a substrate having a gate signal line and a drain signal line; a thin-film transistor that is driven being supplied with a scanning signal from the gate signal line, the thin-film transistor having a gate electrode that is made of a material different than the gate signal line and has a part of which directly laid on or under the gate signal line to establish electrical connection (or electrically connected to the gate signal line or overlaps with the gate signal line, that is made of a layer different than the gate signal line and that is electrically connected to the gate signal line) (see Fig. 32(b)); a pixel electrode that is supplied with a video signal from the drain signal line via the thin-film transistor (See col. 1, lines 17-col. 3, line 4 and col. 24, lines 18-30).

But it does not disclose all the features in a same device and wherein thin film metal layers are formed on a drain region and a source region, respectively, of the first thin-film transistor and/or each of the second thin-film transistors, and portions of the respective metal layers are exposed through respective contact holes that are formed through a passivation film that covers the thin film transistor.

However, the missing limitations are well known in the art because Yamagata discloses these features (See fig. 9A). Besides, it would have been obvious for a person of ordinary skill in the art to use conventional features in similar device to obtain similar results. The combined teaching of Yamamoto and Yamagata does not disclose any metal layer thickness . However any variation in thickness in the present claims is obvious in light of the cited art, because the changes in thickness produce no unexpected function.

The routine varying of parameters to produce expected changes are within the ability of one of ordinary skill in the art. Patentability over the prior art will only occur if the parameter variation produces an unexpected result. In re Aller, Lacey and Hall, 105 U.S.P.Q. 233, 235. In re Recse 129 U.S.P.Q. 402, 406.

A person of ordinary skill is motivated to modify Yamamoto with Yamagata to obtain connections to the drain and source regions .

Therefore, it would have been obvious to combine Yamamoto with Yamagata to obtain the invention as specified in claims 8 and 17-19.

Allowable Subject Matter

5. Claims 9 are 20-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 9 are 20-22 recite "wherein the metal layers are formed at the same time as a gate electrode of the thin-film transistor is formed".

These features in combination with the other elements of the claims are neither disclosed nor suggested by the prior art of record.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ha Nguyen whose telephone number is (703)308-2706 . The examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM, except the first Friday of each bi-week. The phone number for Wednesday is (703) 560-0528.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling, can be reached on (703) 308-3325. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Ha Nguyen

Primary Examiner

9- 25 - 03